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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/826,607	04/16/2004	Wen-Jun Wu	706893US1	1191
24938 7590 01/10/2007 DAIMLERCHRYSLER INTELLECTUAL CAPITAL CORPORATION CIMS 483-02-19 800 CHRYSLER DR EAST AUBURN HILLS, MI 48326-2757			EXAMINER DAVIS, OCTAVIA L	
			ART UNIT 2855	PAPER NUMBER

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/10/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/826,607	<b>Applicant(s)</b> WU ET AL.	
	<b>Examiner</b> Octavia Davis	<b>Art Unit</b> 2855	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____.                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____.  | 6) <input type="checkbox"/> Other: ____.                          |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 – 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bocchicchio et al (5,929,459) in view of Cudnohufsky (3,593,605).

Regarding claims 1, 8 and 9, Bocchicchio et al disclose a method and apparatus for inspecting a workpiece with edge and non-planarity determination comprising calculating a center of gravity 430 of a workpiece 410, determining an axis of the workpiece based at least partially on the center of gravity and determining a position and geometry of a tool according to the axis of the workpiece (See Col. 6, lines 4 – 8, Col. 9, lines 16 – 26 and Col. 11, lines 46 - 48) but does not disclose that the workpiece is a fastener. However, Cudnohufsky discloses an apparatus for dynamically balancing a rotating workpiece wherein an axis of rotation 16 of a workpiece is determined (See Col. 2, lines 47 – 50), a center of inertia or gravity of the workpiece and its position are calculated (See Col. 3, lines 1 – 5 and 8 – 19), the workpiece being a rotating workpiece for a machine tool.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Bocchicchio et al in view of Cudnohufsky for the purpose of,

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advantageously providing a rotating workpiece that is capable of ready assembly and disassembly in a machine tool (See Cudnohufsky et al, Col. 1, lines 6 – 9 and 72 – 75 and Col. 2, lines 1 – 2).

Regarding claims 2 and 10, in Bocchicchio et al, determining the axis includes determining the axis based on a relationship between an initial axis and vertices of the workpiece (See Col. 9, lines 21 – 26).

Regarding claims 3, 5, 11, 12 and 15, in Bocchicchio et al, determining the axis includes assuming an initial axis, rotating the initial axis in at least one direction about an axis and adjusting the initial axis based on a relationship between the initial axis and vertices of the workpiece (See Col. 12, lines 39 – 51).

Regarding claims 4, 6 and 13, in Bocchicchio et al, the relationship is a distance between each vertex and the line (See Col. 9, lines 52 – 56 and Col. 11, lines 55 – 59).

Regarding claim 7, in Bocchicchio et al, the tool is rotated about the axis to determine a tool-rotation envelope (See Col. 12, lines 34 – 38).

Regarding claim 14, in Bocchicchio et al, the step of rotating includes rotating the initial axis in at least one direction about at least one of an x axis, a y axis, and a z axis (See Col. 11, lines 8 – 22).

### ***Conclusion***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Smith (5,301,544) discloses an apparatus for determining the center of gravity of an object.

Butler et al (5,528,927) disclose a center of gravity locator.

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Kuhlmann et al (6,053,033) disclose a device for determining the position of the center of gravity of a test body.

Corrado (6,817,111) disclose an alignment tool for positioning a cutting tool of a shaping machine.

Mukoyama et al (6,161,744) disclose a fastener tool support.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Octavia Davis whose telephone number is 571-272-2176. The examiner can normally be reached on Mon through Thurs from 9 to 5. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz, can be reached on 571-272-2180. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Octavia Davis*

OD/2855  
1/5/07

*Michael Cygan*  
MICHAEL CYGAN, PH.D.  
PRIMARY EXAMINER